CAN-BASED DRIVE

For less than 16-kg e-bikes

Maxon’s CAN-based Bikedrive Air system is deployed in e-bikes from Cipollini (Italy), Transalpes, and Thömus (both Switzerland) enabling bike weights of less than 16 kg.

There is an emerging trend in the e-bike market towards lightweight systems that are almost indistinguishable from standard bicycles, said Maxon in a press release. This development is supported by smaller, more powerful motors and improved battery technologies, the company continued. “Integration is the key word,” said Michele Tittonel, R&D Coordinator at Cipollini. “The second generation of e-race bikes will be powered by electric motors fully integrated into the bike design and complemented with high-end components.”

The Cipollini Flusso is a lightweight race e-bike. It is equipped with the Bikedrive Air system, which weighs 3.5 kg including the battery. At its heart is a mid-mounted motor that delivers 30 Nm of torque. Due to a special free-wheel technology to pedal even without electric assistance is enabled. Michele Tittonel said, “The natural feeling of riding is absolutely crucial; after all, physical effort should remain part of the experience.”

Integration of the drive is also a priority for the Swiss bike manufacturer Transalpes. “With the Bikedrive Air system from Maxon, we want to build perhaps the lightest e-bike for demanding mountain bikers,” as co-owner Michel Juhasz explained. “The new Transalpes E1 rides as naturally as a mountain bike without a motor.” The company’s lightest e-bike with a carbon frame, weighs less than 16 kg.

Mentioned e-bikes can be configured and pre-ordered on the manufacturer websites.

Developed with the Swiss World Cup racing team

The Lightrider E Ultimate by Thömus is a full-suspension, cross-country electric mountain bike weighing less than 15 kg in total, claimed the provider. With a rigid frame, the racing bike can be maneuvered over any terrain, the provider added. For Thomas Binggeli, CEO and owner of Thömus, the development is a milestone: “We developed the Lightrider E Ultimate in close cooperation with Maxon and our World Cup team. The feedback we have had from training on the ride and the low weight has been amazing. The new e-bike is not designed with just professional athletes in mind, however. Every cyclist can enjoy this unique riding experience.”

The bike is available in different frame sizes (also extra-small). The battery is integrated invisibly into the frame. Only an inconspicuously integrated control element on the top tube gives a hint to the hidden battery support. The bike is equipped with a 250-Wh battery and an optional Range Extender (additional 250 Wh).

Thömus provides bicycles for over 30 years. The Lightrider E Ultimate was developed in collaboration with the top riders of the Thömus Maxon Swiss Mountain Bike Racing Team. In the World Cup racing events, the athletes ride the Thömus Lightrider. The introduced e-bike is based on this design.
Bikedrive Air is invisibly integrated in the frame (Source: Thömus)